

IN THE SPECIFICATION:

Please amend the specification as follows:

Please amend the paragraph bridging pages 13 and 14, from line 22 on page 13 to line 18 on page 14, as follows:

In the studies, a layer 31, such as an $\text{In}_{1-x-y}\text{Ga}_x\text{Al}_y\text{As}$ layer, [[21]] was allowed to grow on an InP substrate 30 [[20]]. Then, after the same treatment as that prior to a buried growth in a buried type semiconductor laser device was conducted, the thickness of an InP layer 32 [[22]] was allowed to grow to 400 nm. The $\text{In}_{0.52}\text{Al}_{0.48}\text{As}$ surface having a large Al composition was milky, while $\text{In}_{0.52}\text{Ga}_{0.36}\text{Al}_{0.12}\text{As}$ and $\text{In}_{0.53}\text{Ga}_{0.47}\text{As}$, having small Al compositions, provided mirror surfaces. In addition, the $\text{In}_{0.52}\text{Ga}_{0.24}\text{Al}_{0.24}\text{As}$ surface having Al composition ratios of near 0.24 showed decreased milky and generated cross hatching, and therefore defects at the regrowth interfaces remained yet. These results were summarized in Table 1. The surface morphology tends to be a mirror surface with decreasing Al composition ratio. More specifically, a mirror surface similar to those observed in InP and InGaAs was obtained in a Al composition ratio of 0.13 or less. Furthermore, an observation under a transmission electron microscope revealed that there were no defects of the regrowth layer if a Al composition ratio of 0.13 or less is set.

Please amend the paragraph bridging pages 20 and 21, from line 21 on page 20 to line 17 on page 21, as follows:

Fig. 5 indicates a composition range having an Al composition ratio of 0.13 or less, a composition range of tensile strain, a composition range of tensile strain with a Al composition ratio of 0.13 or less, and a composition range having an Al composition ratio of 0.13 or less and capable of photoluminescence near 1.3 μm (1.25 to 1.35 μm) in the case of tensile strain, the composition ranges being used for $\text{In}_{1-x-y}\text{Ga}_x\text{Al}_y\text{As}$ well layers. In Fig. 5 [[6]], when the composition ratios ($\text{In}_{1-x-y}\text{Ga}_x\text{Al}_y\text{As}$) of InGaAlAs quantum well layers are within the range of H (In: 0.53, Ga: 0.34, Al: 0.13), I (In: 0.53, Ga: 0.40, Al: 0.07), J (In: 0.4, Ga: 0.6, Al: 0), K (In: 0.26, Ga: 0.74, Al: 0), and L (In: 0.4, Ga: 0.41, Al: 0.13), photoluminescence near 1.3 μm is possible without deteriorating the reliability and properties of a device. In addition, in the region of the right side of the line connecting point L and

point K, the wavelength is shorter than required. By contrast, in the region of the left side of the line connecting point H, point I and point J, the wavelength is longer than required. In the region of the upper side of the line connecting point H and point L, the Al composition ratio is large, so that the long-term reliability lacks.

Please amend the paragraph on page 28, from lines 8 to 17, as follows:

As in the case of the example above, the layers until the p-InP clad layer 9 was grown on the n-InP substrate 1, and then a mesa-stripe 16 was formed. Subsequently, a p-InP buried layer 17 (film thickness: 800 nm, Zn concentration: $8 \times 10^{17} \text{ cm}^{-3}$) and an n-InP buried layer 18 (film thickness: 400 nm, Si concentration: $2 \times 10^{18} \text{ cm}^{-3}$) were formed. Furthermore, after a p-InP clad layer 19 and a p-InGaAs contact layer 20 were formed, a laser structure using steps similar to those for Example 1 was constructed.

Please amend the paragraph on page 35, from lines 13 to 19, as follows:

When mounted to the module in Fig. 11 [[9]], the buried type semiconductor laser device 42 of the present invention is operated by means of a driving circuit 25 through a wire 24. An optical output is adjusted by causing a signal at a photo diode 44 for monitoring on the back stage to feedback to the driving circuit 25. Signal light 27 is focused on an optical fiber 29 through a lens 28.